



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 268

EPA-HQ-RCRA-2010-0851; FRL-9715-3

Land Disposal Restrictions: Site-Specific Treatment Variance for Hazardous Selenium-Bearing Waste Treated by U.S. Ecology Nevada in Beatty, NV

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule.

SUMMARY: EPA (or the Agency) is granting a site-specific treatment variance, under the Land Disposal Restrictions program, to U.S. Ecology Nevada in Beatty, Nevada for the treatment of a hazardous selenium-bearing waste generated by the Owens-Brockway Glass Container Company in Vernon, California. The Agency has determined that the chemical properties of the waste generated by the Owens-Brockway Glass Container Corporation differ significantly from the waste used in developing the Land Disposal Restrictions treatment standard for selenium-bearing wastes, and as such cannot be treated to the specified treatment level of 5.7 mg/L for selenium, as measured by the Toxicity Characteristic Leaching Procedure (TCLP). The site-specific treatment variance provides an alternative treatment standard of 59 mg/L TCLP for selenium, with the condition that the waste-to-reagent ratio not exceed 1:0.45.

DATES: This final rule will be effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-RCRA-2010-0851. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information may not be publicly available, because for example, it may be Confidential Business Information (CBI) or other information, the disclosure of

which is restricted by statute. Certain material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the RCRA Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, DC. The Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the RCRA Docket is (202) 566-0270. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: For more information on this rulemaking, contact Jesse Miller, Materials Recovery and Waste Management Division, Office of Resource Conservation and Recovery (MC 5304 P), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone (703) 308-1180; fax (703) 308-0522; or miller.jesse@epa.gov.

SUPPLEMENTARY INFORMATION:

A. Does This Action Apply to Me?

This action applies only to U.S. Ecology Nevada located in Beatty, Nevada.

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I. Background

A. Basis for Land Disposal Restrictions Treatment Variances

Under sections 3004(d) through (g) of the Resource Conservation and Recovery Act (RCRA), the land disposal of hazardous wastes is prohibited unless such wastes are able to meet the Land Disposal Restrictions (LDR) treatment standards (or treatment standards) established by EPA (or the Agency). Under section 3004(m) of RCRA, EPA is required to set “levels or methods of treatment, if any, which substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents from the waste so that short-term and long-term threats to human health and the environment are minimized.” EPA interprets this language to authorize treatment standards based on the performance of the best demonstrated available technology (BDAT). This interpretation was upheld by the D.C. Circuit in *Hazardous Waste Treatment Council v EPA*, 886 F. 2d 355 (D.C. Cir. 1989).

The Agency recognizes, however, that there may be wastes that cannot be treated to the levels specified in the regulations (*see* 40 CFR 268.40) because an individual waste matrix or concentration can be substantially more difficult to treat than those wastes evaluated in establishing

the treatment standard (51 *FR* 40576, November 7, 1986)¹. For such wastes, EPA has a process by which a generator or treater may seek a treatment variance (*see* 40 CFR 268.44). If granted, the terms of the variance establish an alternative treatment standard for the particular waste at issue.

B. Basis of the Current Selenium Treatment Standard

Treatment of selenium poses special difficulties. In particular, it can be technically challenging to treat wastes containing selenium in combination with other metals e.g., cadmium, lead and/or chromium because of their different chemical properties and solubility curves (62 *FR* 26041, May 12, 1997).

The current treatment standard for a waste exhibiting the toxicity characteristic for selenium (RCRA Hazardous Waste D010) is based upon the performance of stabilization on low concentration selenium wastes. When the Agency developed the treatment standard for selenium, EPA believed that wastes containing high concentrations of selenium were rarely generated and land disposed (59 *FR* 47980, September 19, 1994). The Agency also stated that it believed that, for most wastes containing high concentrations of selenium, recovery of the selenium would be feasible using recovery technologies currently employed by copper smelters and copper refining operations (*Id.*). The Agency further stated in 1994, that it did not have any performance data for selenium recovery, but available information indicated that some recovery of elemental selenium out of certain types of scrap material and other wastes was practiced in the United States.²

¹ According to §268.44 (a) (1), a petitioner may obtain a site-specific variance if “it is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method.”

² Because selenium is a non-renewable resource, and because the wastes in question contain high selenium concentrations, EPA’s preference would be to recover the selenium in an environmentally sound manner. However, based on information contained in the Mineral Commodity Summaries 2010 published by the U.S. Department of the Interior, U.S. Geological Survey, the amount of domestic production of secondary selenium is estimated to be very small because most of the materials eligible for possible secondary smelting (e.g., scrap xerographic and electronic materials) were exported for recovery of the contained selenium.

In 1994, the Agency used performance data from the stabilization of a mineral processing waste, that was characteristically hazardous (RCRA Hazardous Waste D010), to set the national treatment standard for selenium. At that time, we determined that this characteristically-hazardous mineral processing waste represented the most difficult-to-treat selenium waste. This untreated waste contained up to 700 ppm total selenium and 3.74 mg/L selenium, as measured by the Toxicity Characteristic Leaching Procedure (TCLP). The resulting post-treatment levels of selenium in the TCLP leachate were between 0.154 mg/L and 1.80 mg/L, which (after considering the range of treatment process variability) led to EPA establishing a national treatment standard of 5.7 mg/L TCLP for D010 selenium nonwastewaters.³ In the Phase IV LDR final rule, the Agency determined that a treatment standard of 5.7 mg/L TCLP, continued to be appropriate for D010 nonwastewaters (63 *FR* 28556, May 26, 1998). The Agency also changed the universal treatment standard (UTS) for selenium nonwastewaters from 0.16 mg/L to 5.7 mg/L TCLP.

II. Basis for Today's Determination

Under 40 CFR 268.44, facilities can apply for a site-specific treatment variance in cases where a waste that is generated under conditions specific to only one site cannot be treated to the specified LDR treatment standards. In such cases, the generator(s) or the treatment facility may apply to the Administrator, or to EPA's designated representative, (in this case the Assistant Administrator for Solid Waste and Emergency Response) for a site-specific variance. The applicant for a site-specific variance must demonstrate that, because the physical or chemical properties of the waste differ significantly from the waste analyzed in developing the treatment

³ The calculation of the LDR treatment standard was based on a specific method, sometimes called "C 99," which has been used in other LDR rulemakings. This methodology seeks to account for process variability (including variability that may be attributed to sampling and analytical processes). See 63 *FR* 28556, May 26, 1998 and the document, Final – Best Demonstrated Available Technology (BDAT) Background Document for Quality Assurance/Quality Control Procedures and Methodology, USEPA. October 23, 1991.

standard, the waste cannot be treated to the specified levels or by the specified methods. There are other grounds for obtaining variances, but this is the only provision relevant to this action.

III. Development of This Variance

A. U.S. Ecology Nevada Petition

On September 16, 2008, U. S. Ecology Nevada (USEN) in Beatty, Nevada submitted a petition requesting a site-specific treatment variance from the LDR treatment standards for hazardous selenium-bearing waste generated by the Owens-Brockway Glass Container Company (Owens-Brockway) in Vernon, California. Owens-Brockway operates a glass manufacturing facility that generates approximately 50 to 100 tons per year of electrostatic precipitator (ESP) dust requiring management as a hazardous waste. The ESP dust is generated by the glass furnace air emissions control system and is hazardous due to its high concentrations of leachable arsenic (RCRA Hazardous Waste D004), cadmium (RCRA Hazardous Waste D006), lead (RCRA Hazardous Waste D008), and selenium (RCRA Hazardous Waste D010). USEN submitted analytical data demonstrating that the chemical properties of the waste differed significantly from the waste analyzed in developing the LDR treatment standard.⁴ They also submitted data demonstrating that the waste could not be treated to the specified level of 5.7 mg/L TCLP for selenium. USEN requested an alternative treatment standard of 59 mg/L TCLP, which was

⁴ Total selenium concentrations in the electrostatic precipitator (ESP) dust generated at the Owens-Brockway facility range from 2,400 mg/kg to 5,700 mg/kg. The untreated waste has a leachable selenium concentration ranging from 228 mg/L to 440 mg/L TCLP. In addition, the untreated waste has a leachable arsenic concentration ranging from 3.3 mg/L to 8.6 mg/L TCLP, a leachable cadmium concentration ranging from 3.9 mg/L to 11.0 mg/L TCLP, and a leachable lead concentration ranging from <0.10 mg/L to 16.3 mg/L TCLP.

calculated using analytical treatment data from a stabilization mixture of ferrous sulfate, quick lime and sodium sulfide flakes with a 1:0.45 waste to reagent ratio.⁵

B. Notices on Granting a Site Specific Treatment Variance to USEN

On April 6, 2011, the Agency issued a Direct Final rule (76 *FR* 18921) and a parallel Proposal (76 *FR* 19003) granting a site-specific treatment variance to USEN for the treatment and disposal of hazardous selenium-bearing waste generated by Owens-Brockway. The site-specific treatment variance provided for an alternative treatment standard of 59 mg/L TCLP with the condition that the waste to reagent ratio not exceed 1:0.45. The Agency concluded that USEN had demonstrated that the chemical properties of the waste generated by Owens-Brockway differed significantly from the waste analyzed in developing the LDR treatment standard, and that the waste could not be treated to the specified level of 5.7 mg/L TCLP for selenium, necessitating an alternative treatment standard.

The Direct Final rule and the parallel Proposal also included an action to withdraw the site-specific treatment variance issued to Chemical Waste Management (CWM) in Kettleman Hills, California for this same waste.⁶ The Agency issued both a Direct Final and a parallel Proposal because EPA considered these actions to be non-controversial. However, EPA stated that if adverse comment was received, the Direct Final rule would be withdrawn and we would proceed

⁵ The selenium concentrations used to calculate the alternative treatment standard were (in mg/L TCLP) 49.34, 51.39, 49.39, 43.91, and 54.34. The most effective treatment recipe was determined using a 50 gram sample of waste where reagents were listed as a percent of waste sample weight. For example, 20% ferrous sulfate, 15% quick lime, and 10% sodium sulfide flakes would measure out as 10 grams of ferrous sulfate, 7.5 grams of quick lime, and 5 grams of sodium sulfide flakes for a total of 22.5 grams of total reagent. The waste to reagent ratio was then calculated by dividing 22.5 by 50 to get a waste to reagent ratios of 1:0.45.

⁶ EPA considered that technology-based treatment standards, whether adopted by generally applicable rule or through a variance to the generally applicable rule, serve as the measure of when threats posed by land disposal of the hazardous waste are “minimized,” as required by RCRA section 3004(m). See 55 *FR* 6640 (February 26, 1990). Thus, EPA has typically limited the standards adopted by a variance to a single standard. See 70 *FR* 44505 (August 3, 2005). We continued this practice by issuing a Direct Final rule and parallel Proposal to withdraw the current variance granted to CWM (69 *FR* 6567, February 11, 2004), determining that the treatment standard issued to CWM is less stringent than the standard we would be granting, both with respect to potential concentrations of selenium released to the environment and also the waste to reagent ratios.

with a subsequent final rule. The Agency received no comments on granting a site-specific treatment variance to USEN, however, one adverse comment was received on withdrawing the CWM variance. As a result, on May 24, 2011, the Direct Final rule was withdrawn (76 *FR* 30027). The comment can be found in the docket supporting this rule.

EPA is not taking action on the proposal to withdraw the existing site-specific treatment variance granted to CWM. EPA has authorized the State of California to grant and administer site-specific treatment variances under 40 CFR 268.44. [See 75 *FR* at 60401 (September 10, 2010)]. As a result, California now has sole authority to deal with issues pertaining to treatment variances for entities within its borders, including whether to withdraw the treatment variance to CWM for Owens-Brockway selenium-bearing waste, and any other issues related to that treatment variance.⁷ Necessarily, therefore, EPA is not responding to any of the comments submitted on this issue, since all comments pertain to issues within the scope of the authorized California program.

IV. Granting USEN a Site-Specific Treatment Variance

EPA is promulgating, as proposed, a site-specific treatment variance, from the LDR treatment standards, for hazardous selenium bearing waste generated by Owens-Brockway and managed by USEN of Beatty, Nevada. With the information provided to the Agency as part of their petition, EPA has concluded that the chemical properties of Owen-Brockway's selenium-bearing waste differ significantly from the waste used in developing the LDR treatment standard and that the generated waste cannot be treated to the specified treatment level of 5.7 mg/L TCLP. The site-specific treatment variance provides an alternative treatment standard of 59 mg/L for

⁷ It should be noted that EPA is making a conforming change to footnote 7 of the table in section 40 CFR 268.44. The footnote originally read, "D010 wastes generated by these two facilities must be treated by Chemical Waste Management, Inc. at their Kettleman Hills facility in Kettleman City, California." The two facilities referred to Owens-Brockway and a second facility, St. Gobain Containers, El Monte, CA, that also has an existing variance for selenium waste. The footnote now reads, "D010 wastes generated by this facility must be treated by Chemical Waste Management, Inc. at its Kettleman Hills facility in Kettleman City, California."

selenium with the condition that the waste to reagent ratio not exceed 1:0.45 when the waste is treated and disposed at USEN's permitted hazardous waste facility. The Agency received no comments disagreeing with the Agency's proposal.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 *FR* 51735, October 4, 1993) and is therefore not subject to review under Executive Orders 12866 and 13563 (76 *FR* 3821, January 21, 2011).

B. Paperwork Reduction Act

This action does not impose any new information collection burden. This action grants a site-specific treatment variance to USEN for the treatment of hazardous selenium-bearing waste generated by Owens-Brockway under RCRA's LDR program. The Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulations at 40 CFR 268.42 and .44 under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2050-0085. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

This site-specific treatment variance does not create any new requirements. Rather, it establishes an alternative treatment standard for a specific waste that applies to only one facility, USEN located in Beatty, Nevada. Therefore, we hereby certify that this rule will not add any new regulatory requirements to small entities. This rule, therefore, does not require a regulatory flexibility analysis.

D. Unfunded Mandates Reform Act of 1995

This action contains no Federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538 for State, local, or tribal governments or the private sector. This action imposes no enforceable duty on any State, local or tribal governments or the private sector. This action would not impose any new duties on the states hazardous waste program. EPA has determined, therefore, that this rule would not contain regulatory requirements that might significantly or uniquely affect small governments in that the authority for this action exists with the Federal government. Therefore, this action is not subject to the requirements of sections 202 or 205 of the UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

This action does not have federalism implications. This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This action grants a site-specific treatment variance applicable to one facility. Thus, Executive Order 13132 would not apply to this action.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action would not have tribal implications, as specified in Executive Order 13175 (65 *FR* 67249, November 9, 2000). This action is a site-specific treatment variance that applies to only one facility, which is not a tribal facility or located on tribal lands. Thus, Executive Order 13175 would not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 (62 *FR* 19885, April 23, 1997) as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This action is not subject to Executive Order 13045 because it would not establish an environmental standard intended to mitigate health or safety risks.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 *FR* 28355 (May 22, 2001)) because it would not be a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”), Public Law 104-113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards

(e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 *FR* 7629 (February 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this rule will not have a disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. The site-specific treatment variance being finalized applies to a selenium bearing waste that will be treated and disposed in an existing, permitted RCRA facility, ensuring protection to human health and the environment. Therefore, the rule will not result in any disproportionately negative impacts on minority or low-income communities relative to affluent or non-minority communities.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the Agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule, when finalized, and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A Major rule cannot take effect until 60 days after it is published in the *Federal Register*. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 268

Environmental Protection, Hazardous Waste, and Variances.

Dated: August 10, 2012

Mathy Stanislaus
Assistant Administrator, Office of Solid Waste and Emergency Response

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 268 - LAND DISPOSAL RESTRICTIONS

1. The authority citation for part 268 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, and 6924.

2. In §268.44, the table in paragraph (o) is amended as follows:

a..By revising the existing entry for “Owens Brockway Glass Container Company, Vernon, CA.”

b. By adding in alphabetical order an additional entry for “Owens Brockway Glass Container Company, Vernon, CA.”

c. Republishing the entry for “St. Gobain Containers, El Monte, CA.”

d. By revising footnote 7.

e. By adding a new footnote 15.

f. By adding a new footnote 16.

The revisions and additions read as follows:

§268.44 Variance from a treatment standard.

* * * * *

(o) * * *

Table.--Wastes Excluded From the Treatment Standards under §268.40

				Wastewaters		Nonwastewaters	
Facility name	Waste	See also	Regulated	Concentratio	Note	Concentratio	Note
\1\ and	code		hazardous	n (mg/L)	s	n (mg/kg)	s

Address			constituent				
* * * * *							
Owens Brockway Glass Container Company, Vernon, CA \6\.	D010	Standards under § 268.40	Selenium	NA	NA	51 mg/L TCLP	(15)
Owens Brockway Glass Container Company, Vernon, CA \6\.	D010	Standards under § 268.40	Selenium	NA	NA	59 mg/L TCLP	(16)
* * * * *							
St. Gobain Containers, El Monte, CA \5\, \7\.	D010	Standards under § 268.40	Selenium	NA	NA	25 mg/L TCLP	NA
* * * * *							

\1\ A facility may certify compliance with these treatment standards according to provisions in 40 CFR 268.7.

* * * * *

\5\ Alternative D010 selenium standard only applies to dry scrubber solid from glass manufacturing wastes.

\6\ Alternative D010 selenium standard only applies to electrostatic precipitator dust generated during glass manufacturing operations.

\7\ D010 wastes generated by this facility must be treated by Chemical Waste Management, Inc. at its Kettleman Hills facility in Kettleman City, California.

* * * * *

\15\ This alternative standard applies only to D010 wastes generated by this facility and treated by Chemical Waste Management, Inc. at its Kettleman Hills facility in Kettleman City, California.

\16\ This alternative standard applies only to D010 wastes generated by this facility and treated by U.S. Ecology Nevada at its facility in Beatty, Nevada. This alternative treatment standard is conditioned on the waste-to-reagent ratio not exceeding 1 to 0.45.

* * * * *

[FR Doc. 2012-20504 Filed 08/21/2012 at 8:45 am; Publication Date: 08/22/2012]